STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

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| SOUTHEASTERN ILLINOIS ELECTRIC, COOPERATIVE, INC., | ) | |
| Complainant, Counter-Respondent, | ) | |
| vs. | ) | DOCKET NO. 00-0583 |
| ILLINOIS POWER COMPANY | ) | |
| Respondent, Counter Complainant. | ) | |

**PREPARED DIRECT TESTIMONY**
**FOR DUSTIN D. TRIPP ON BEHALF OF**
**SOUTHEASTERN ILLINOIS ELECTRIC COOPERATIVE, INC. (SEIEC)**
**IN SUPPORT OF THE COMPLAINT BY SEIEC IN THE ABOVE CAUSE**

Q: Would you state your name please?

A: Dustin D. Tripp.

Q: By whom are you employed?

A: SouthEastern Illinois Electric Cooperative, Inc. (SEIEC)

Q: In what capacity are you employed by SEIEC?

A: Engineering and Customer Service Manager.

Q: What is your educational background?

A. I attended John A. Logan Junior College two years and then transferred to the University of Missouri - Rolla, where I completed my undergraduate college work receiving a Bachelors of Science in Electrical Engineering from the University of Missouri - Rolla, in 1992. I received a Masters of Business

Administration from the University of Illinois in 1999.

Q: What are your current responsibilities with SEIEC?

A: I oversee the engineering department which includes all engineering technicians; the meter department, consisting of two meter technicians; the dispatch of the Cooperative electric services; and also oversee customer service responsibilities for the Cooperative. Basically, I oversee the engineering department of SEIEC. In addition, I work with all customers with respect to their electric service needs and the engineering requirements to provide customers electric service.

Q. What is your employment history?

A. After graduation from the University of Missouri - Rolla in 1992 with an Electrical Engineering degree, I worked for two years with Black and Veatch Consulting Engineers located in Overland Park, Kansas. While there, I spent my first one year and eight months doing design work and the next four months as a field engineer supervising power plant construction. In 1994, I was employed by Eastern Illini Electric Cooperative in their engineering and operations department until late 1999 when I joined the staff at SEIEC.

Q: Are you familiar with the request for electric service by Arclar Company, LLC at a proposed Willow Lake Mine Portal No. 3 on the eastern edge of Saline, County, Illinois?

A: Yes.

Q: How did you become familiar with that?

A: We received a request for electric service from Heath A. Lovell, Project

Manager of Arclar requesting electric service to the Willow Lake Mine Portal in Saline County, Illinois. This request is dated June 22, 2000, a copy of which is attached to the Direct Testimony of James M. Cummins as SEIEC Exhibit 1.

Q: Did you pursue providing electric service to Arclar at this mine site?

A: Yes. We met with Heath A. Lovell and others to discuss the electrical load requirements for the mine and the most appropriate way to provide electric service to the Willow Lake Mine Portal No. 3 in accordance with accepted engineering practices. In addition, we serve Arclar Company at one other mining operation consisting of a preparation plant and mine portal operated by Big Ridge, Inc. and located in Saline County, Illinois. It is an underground operation and therefore similar to the proposed Willow Lake Mine Portal which is an underground mine.

Q: How does SEIEC provide electric service to the Big Ridge Mine Preparation Plant and Portal No. 2?

A: SEIEC provides that electric service from the SEIEC Equality Substation. The electric service is fed by means of a 69KV line which attaches to the Equality Substation which is the metering point and is the point of delivery of electric service by SEIEC to the Big Ridge Mine Preparation Plant and Portal No. 2 at that location. The Equality Substation is fed by a 69KV transmission line owned by Southern Illinois Power Cooperative (SIPC) which is the wholesale electric provider to SEIEC.

Q: Has Arclar Company and their representatives explained why they desire to

have SEIEC provide electric service to the Willow Lake Mine Portal?

A: Yes. Arclar advised that it preferred to have electric service provided by SEIEC because the SIPC 69KV transmission line feeding the Equality Substation is a relatively new transmission line. Its construction consists of single wood poles, each with two crossarms and three conductors each 4/0 in size ACSR and was constructed in 1974. Therefore, the construction is relatively new and in good condition. There also have been very few outages on the transmission line that provides electric service to the Big Ridge Preparation Plant and Portal No. 2. Since January 1, 1996, there have only been two outages on the 69KV line feeding the Equality Substation, Big Ridge Preparation Plant, and Portal No. 2, one for 14 minutes resulting from a pole fire and one for 12 minutes from a broken cross arm. Copies of the records maintained by SEIEC for outages with regard to the 69KV transmission line feeding the Equality Substation and the Equality Substation itself are attached as SEIEC Exhibit 4 to the Direct Testimony of James M. Cummins, and cover the period of time from January 1, 1996 to the present. The 69KV transmission line from the Equality Substation to the Arclar Big Ridge mining operations is owned by Arclar. However, SEIEC is hired by Arclar to maintain that line and any outage on that line would affect the Equality Substation and SEIEC would then be affected. Thus, SEIEC knows there has not been any outage on that Arclar line.

Q: Is reliability of service important to Arclar Company as a mining operator?

A: Yes. Arclar has provided SEIEC several criteria by which it determines their electric suppliers. They are: reliability; safety; financial; and service. Heath Lovell has advised me that SEIEC meets all of Arclar's requirements with respect to these criteria. The reliability of the electric facilities provided by SEIEC has been superb with very few outages.

Q: Why is reliable electric service important to Arclar's mining operations?

A: The fact that there are few outages provides for a very safe mine operation. If an outage of 15 minutes or longer occurs, the mine must be shut down because of mining regulations and everyone has to be evacuated from the mine. No one can go back into the mine until it has been examined by a licensed State of Illinois mine examiner. That will mean the mine will be shut down for 2 to 4 hours after ventilating fans have been re-energized depriving Arclar of mine production during that time period resulting in financial loss. Thus, Arclar is very sensitive to both electric outages and the potential for the same because of safety and financial considerations.

In addition, Arclar can aggregate the mine load from the Willow Lake Mine Portal with its Big Ridge mining operations and receive a very favorable cost for electric power which is financially beneficial to them.

Further, Arclar is sensitive to the service issue. SEIEC has provided very good and prompt maintenance service whenever any outage or repair work has been needed with respect to electric facilities providing service to Arclar Mine operations. This type of response to a customer's needs is very important to

Arclar. Thus, Arclar has advised SEIEC that it prefers SEIEC as its electric provider for the Willow Lake Mine Portal.

Q: Are there any other 69 KV transmission lines located in the vicinity of the Willow Lake Mine Portal No. 3 site?

A: Yes. There is a CIPS 69 KV transmission line running from Muddy River to Shawneetown, Illinois, that is approximately three-fourths of a mile North of the mine site.

Q: As the engineer for SEIEC working with Arclar to determine the best way to provide the customer with electric service, did you consider the CIPS 69 KV Muddy River line?

A: Yes, it was considered. However, Arclar, through its engineer, had already determined that the CIPS 69 KV transmission line was not reliable to meet the mining requirements of the Willow Lake Mine Portal No. 3.

Q: Have you been provided in your capacity as the engineer for SEIEC outage records for the CIPS 69 KV Muddy River line?

A: Yes. I have been provided with outage records represented by Exhibit 11, attached to the Direct Testimony of James M. Cummins which are for the period from January 1, 1996 to April 23, 2001 for the CIPS 69 KV Muddy River transmission line in question.

Q: Do you have an opinion based upon your engineering training and experience as to what those outages reflect with respect to reliability of the line?

Q: Yes. I have an opinion.

Q: What is your opinion?

A: The records reflect that there have been 31 outages since January 1, 1996. Of those 31 outages, 14 occurred during the period January 1999 through April 2001. This many outages is far too many and in my opinion reflects a line that is totally unreliable for the type of electrical service required by Arclar for the Willow Lake Mine Portal site.

Q: Have you received information that CIPS is considering reconductoring the 69 KV Muddy River transmission line and that IP has complained to CIPS about the number of outages, irrate customers and the unreliability of the CIPS 69 KV Muddy River transmission line?

A: Yes. I received a copy of notes made by Jason E. Genovese, Transmission Line Manager for CIPS with regard to the CIPS 69 KV transmission line in question. This document was received from IP during discovery in this case. It is attached as SEIEC Exhibit 12 to the Direct Testimony of James M. Cummins.

Q: What does this information reveal with regard to the CIPS 69 KV Muddy River transmission line?

A: This memorandum notes two things. First, CIPS is evaluating a proposed project to reconductor this particular 69 KV transmission line due to its reliability performance. Secondly, IP has advised CIPS that the number of outages experienced on this 69 KV transmission line have increased significantly and that customers being fed from that line are becoming irate.

Q: Does this information support your opinion that the CIPS 69 KV Muddy River transmission line will be unreliable in providing the necessary electric service to Arclar?

A: Yes. This information supports my opinion that the CIPS 69 KV Muddy River transmission line does not provide reliable electric service in accordance with the requirements within the underground coal mining industry and therefore is not a practical line for Arclar to consider to provide electric service to the Willow Lake Mine Portal site.

Q: Have you, in your position as Manager of the SEIEC engineering department, determined the location of a 69 KV transmission line which is adequate and will provide reliable electric service for the Willow Lake Mine Portal No. 3?

A: Yes. The SEIEC Equality Substation is fed by a 69 KV transmission line and that substation serves as a delivery and metering point for the electric service to Arclar's Big Ridge Inc. mine operations at the Preparation Plant and Portal No. 2. That line meets the adequacy and reliability requirements of Arclar. As noted in my earlier testimony, that line has only experienced two outages, each less than 15 minutes since January 1996. That line and substation meet a very high reliability standard.

Q: Have you determined the best means for providing electric service to the customer taking into account the adequacy of existing lines?

A: Yes. The best means of providing service to the customer is from the SEIEC Equality Substation and delivery point.

Q: In reaching that conclusion, did you give consideration to any other 69 KV transmission lines in the area?

A: Yes. There is a Central Illinois Public Service Company (CIPS) 69 KV transmission line located approximately three-fourths of a mile north of the proposed mine site. However, based upon Arclar's mining needs and need for reliability, the CIPS 69 KV line has experienced too many outages in both frequency and duration to meet Arclar's service requirements. Thus, in my opinion, that 69 KV transmission line is not sufficiently reliable to provide electric service due to its outage record. Therefore, the closest 69 KV transmission line available to the mine site is the 69 KV transmission line feeding the Equality Substation and owned by Southern Illinois Power Cooperative (SIPC). That line is located approximately 3 miles from the proposed mine site, but has 4.17 circuit miles due to the routing of the line. To my knowledge IP does not have a 69 KV transmission line closer then that existing SIPC/SEIEC transmission line.

Q: What is the reliability of the 69 KV line feeding the Equality Substation and the SEIEC Equality delivery point?

A: It is very reliable. As I testified earlier that line and delivery point have experienced only two outages each less than 15 minutes since January 1996.

Q: What, if anything, has SEIEC done to ensure the reliability of its service to the Equality Substation and delivery point and its service to the Arclar mining operation?

A: There are two different 69KV feeds to a motor operated switch located just 5 miles southwest of the Equality Substation. The 69 KV line from that switch to the Equality Substation and the Arclar delivery point is only 6 miles. Thus, if an outage occurs on one of the 69 KV feeds to the Equality Substation and the Arclar delivery point, SIPC/SEIEC has the ability to operate the motor operated switch remotely via a 24 hour dispatch center in order to feed the Equality substation and Arclar delivery point from the alternate feed and limit the outage duration to less than the 15 minute requirement of Arclar in almost all cases. This design and implementation is a very common practice for SIPC/SEIEC due to our knowledge and experience in serving the underground mining industry and their sensitivity to outages of any duration but especially those with durations longer than 15 minutes.

Q: Have you inspected the CIPS KV Muddy River transmission line and how it is fed?

A: Yes.

Q: From that inspection, can you describe what, if any, exposure the CIPS 69 KV Muddy River transmission line may have to outages that exceed the 15 minute requirement of Arclar?

A: Yes. The CIPS 69KV line that IP would tap to serve Arclar is approximately 29 miles long and is all fed from one breaker located at the Muddy substation. Of the 29 miles of line, approximately 26 miles was constructed utilizing parallel conductors which means the total circuit is approximately 55 miles

long. If an outage would occur anywhere along this 55 mile circuit for any reason such as equipment failure, trees, storm, animals, etc., Arclar's Willow Lake Portal No. 3 would experience the outage. To the best of my knowledge, CIPS does not have the ability to operate a motor operated switch to an alternate feed. This means that Arclar's Willow Lake Portal No. 3 would incur the outage until line personnel could find the cause of the outage, repair the damage and re-energize the line. It is very, very unlikely that the outage could be restored in less than the 15 minute requirement of Arclar.

Q: Can you summarize the difference in the exposure to outages for customers of SEIEC receiving service from the Equality Substation delivery point and customers receiving service from the CIPS 69KV Muddy River transmission line?

A: Yes. In summary, the SIPC 69 KV line serving the Equality substation and the Arclar delivery point has an extended outage exposure level of only 6 circuit miles and the CIPS 69 KV line that IP would utilize to serve Arclar has an extended outage exposure level of 55 circuit miles. In addition, the SIPC 69 KV line serving the Equality substation and the Arclar delivery point has two different 69 KV feeds that can be switched remotely via a 24 hour dispatch center in order to limit the outage duration to a very short period. To the best of my knowledge, CIPS does not have an alternate feed that can be switched remotely, therefore the outage durations will likely be longer than the 15 minute requirement of Arclar. Therefore, the SIPC 69KV line and configuration is

much better suited to provide higher reliability and faster restoration times than the CIPS 69 KV line.

Q: Have you, at the direction of James M. Cummins General manager of SEIEC, prepared or caused to be prepared a map reflecting the location of the SEIEC Equality Substation; the SEIEC July 2, 1965 existing lines; the Arclar Big Ridge Mine operations; the 69KV transmission line owned by Arclar to serve those Big Ridge mine operations; and the proposed location of the Willow Lake Mine Portal No. 3 along with the proposed location of the 69KV transmission line to serve that new mine portal No. 3?

A: Yes. Such a map is attached as SEIEC Exhibit 9 to the Direct Testimony of James M. Cummins.

Q: What is the distance of the proposed 69KV transmission line to serve the Willow Lake Mine Portal No. 3?

A: Approximately 4.17 circuit miles.

Q: What is the cost of construction for that transmission line?

A: It is approximately $125,000.00 per mile, for a total cost of $521,250.00.

Q: What is the cost estimate for construction of the 69 KV transmission line to the Willow Lake Mine Portal No. 3 based upon?

A: SEIEC contracts with third party contractors for construction of this type of line. When I plan for this type of transmission line construction, I utilize historical costs from actual contracts for similar construction as a guide in estimating such construction costs. Historically, construction costs for this size

and type of transmission line required by Arclar, is $125,000.00 per mile of line. However, the actual cost will not be determined until bids are taken for such construction.

Q: Who will pay for that construction cost?

A: It will be paid by the customer, Arclar Company, by means of a monthly billing included with the power bill for operation of the Willow Lake Mine Portal.

Q: Are you familiar with the site of the Willow Lake Mine Portal?

A: Yes. I have reviewed the site plan which is attached as SEIEC Exhibit 18 to the Direct Testimony of Danny W. Bailey, Vice President of Operations of Arclar.

Q: Is that mine site located within the territory delineated to be served by either SEIEC or IP under the Service Area Agreement existing between SEIEC and IP?

A: A portion of it is in the territory designated to be served by SEIEC and a portion of the mine site is located in the area delineated to be served by IP. In addition, Arclar plans to extend its underground Willow Lake mine operation northerly encompassing Sections 1, 2, and 3 of Township 9 South, Range 7 East, College Township and Sections 1, 2, 3, 10, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 27, 35 and 36, Township 8, College Township, and South, Range 7 East, East Eldorado Township, Saline County, Illinois, and to construct a Portal No. 4 and air shaft in the Northwest Quarter of the Southeast Quarter of Section 24 in East Eldorado Township. The location of Mine Portal No. 4 and the air shaft which will require electrical service is located in the territory delineated to

be served by SEIEC under the SEIEC/IP Service Area Agreement.

Q: Is there an advantage to Arclar to be served from the Equality Substation delivery point?

A: Yes. Arclar will receive a financial advantage because the electrical load for the Big Ridge Mine operations and the Willow Lake Mine Portal No. 3 and planned Portal No. 4 can be aggregated, thus allowing Arclar to receive a lower cost for their electric power for the mine operations.

Q: Who does the customer prefer?

A: The customer prefers electric service from SEIEC.

Q: What has SEIEC done to assist in creating the demand for the service in question?

A: SEIEC has provided electric service to Arclar Company and the Big Ridge Mine operations since 1989 in a reliable fashion such that the customer is very happy with the service of SEIEC. In addition SEIEC has served numerous customers in this portion of Saline County since 1940. These customers and this service are shown on the map attached as SEIEC Exhibit 9 to the Direct Testimony of James M. Cummins. The customer's shown on this map are reflected by the records of SEIEC as to the date they commenced receiving electric service as well as the location of such electric service.

Q: Are you familiar with the projected cost of electric service per kilowatt hour for the Arclar Willow Lake Mine Portal No. 3 operation as prepared under the direction and supervision of James M. Cummins and attached to his Direct

Testimony as SEIEC Exhibit No. 5?

A: Yes. I am familiar with that study. It is based upon the projected electrical usage and projected load by the Arclar mining operation at Willow Lake Mine Portal No. 3.

Q: Have you reviewed such study?

A: Yes.

Q: Have you made a calculation as to the effect of the outages as shown by the outage records for the CIPS 69 KV Muddy River transmission line upon the Arclar mining operation for the Willow Lake Mine Portal No. 3 should Arclar be required to take electric energy from IP and the CIPS 69 KV Muddy River transmission line?

A: Yes.

Q: What do your calculations show with respect to the financial effect upon Arclar in that event?

A: Arclar projects a production rate of 700 tons of coal per hour with a value of $25.00 per ton which equates to $17,500.00 in revenue per hour. Based upon the outage information provided for the CIPS 69 KV Muddy River transmission line from January 1, 1999 to April 23, 2001, those outages would have caused Arclar to lose approximately 28.5 hours of production. Thus, Arclar would have lost a total of $498,750.00 in revenue during the 28 month period caused by the requirement that Arclar take electric power from IP and the CIPS 69 KV Muddy River transmission line. At this rate, Arclar could lose a grand total of

$2,565,000.00 in revenue over the life of the mine based upon a 12 year life expectancy caused by the requirement that Arclar take electric power from IP and the CIPS 69 KV Muddy River transmission line.

Dustin D. Tripp

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## PROOF OF SERVICE

I, JERRY TICE, hereby certify that on the 19th day of June, 2001, I deposited in the United States mail at the post office at Petersburg, Illinois, postage fully paid, a copy of the document attached hereto and incorporated herein, addressed to the following persons at the addresses set opposite their names:

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